

Leak ignored by state spreading in Denver

TOXIC from Page 1A

pollution — 224 times greater than the health standard — was found inside a house 1½ miles from the old Redfield factory. That's the farthest home checked so far for Redfield contamination.

Last week, that house, in the 5100 block of East Missouri Avenue, had a "For Sale" sign in front of it. A real estate agent said the owner could not be reached for comment.

State health officials said they plan this summer to investigate cancer rates in the contaminated area.

A May 1999 study, conducted in a much smaller neighborhood tract when officials believed the plume was smaller, found no unusual occurrences of liver cancer, the most serious illness linked to the leaking chemical.

Neighborhood concern

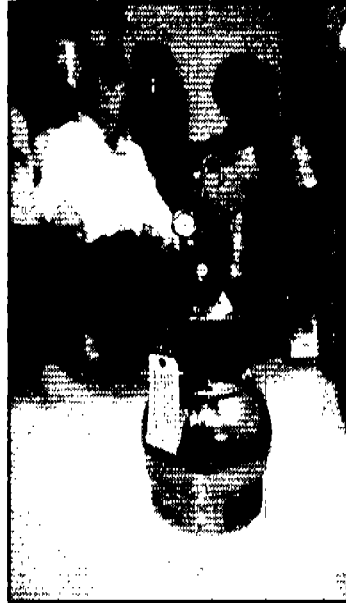
Neighborhood residents voiced concern for their health and their property values.

Dave Huss, 35, said he learned of possible pollution problems this spring when a work crew began digging a test well in the street in front of his Nebraska Way house. He asked for an indoor air test and got distressing results: His home air was contaminated at levels 157 times greater than the health standard.

"When we first heard about it, we were panicked and angry. I called a Realtor. I called two lawyers," said Huss, a technology worker. "We've got a 2-year-old daughter. Say you've got kids. Would you buy my house right now?"

Still, Huss, like many neighborhood residents, said his family was sticking with the area, largely because the former Redfield owner, the St. Louis-based Brown Shoe Co., agreed to install a special ventilation fan to remove the colorless and odorless pollution vapors from the home.

The \$1.6 billion-a-year company, best known for its Famous Footwear, Buster Brown and Naturalizer brands, said it will install \$1,300 ventilation systems in all homes with pollution exceeding health standards. The company owned Redfield from 1979 to 1984.



The Denver Post / Helen H. Davis

Southeast Denver resident Jeanette Millar, left, and Marci Skinner of Envirogroup Ltd. discuss a pollution-detecting device being placed in Millar's home. The device will test for contaminants in homes near the former Redfield rifle scope plant.

Also, breathing high levels of DCE affects the central nervous system, and breathing lower levels over time may damage the nervous system, liver and lungs, according to federal health officials.

EPA's health standard for DCE pollution has been in place at least 10 years, an agency official said. But after reviewing DCE health studies, mainly from the mid-1980s, a key EPA toxicologist now says DCE may be less dangerous than previously thought.

He's proposed a more lenient standard for DCE pollution. A panel of outside scientists is to review that in June in Washington, D.C.

It's unclear how long the Redfield factory has been leaking pollution.

The plant, which had a history of regulatory trouble, was built in 1955 and operated by several owners before it started producing high-quality rifle scopes in the mid-1960s under the Redfield name. At its peak, Redfield produced 125,000 scopes a year with 160 workers.

"We are being very proactive," said Dennis Snyder, director of corporate planning for Brown. "We are going as quickly as we can. We are trying to get to the end of this plume as quickly as we can."

A company-financed Web site, www.redfieldsite.org, lists real estate summaries indicating that local property values haven't been hurt by Redfield pollution.

But few polluters in the Rocky Mountain West have sullied so many homes.

Though Superfund workers cleaned as many as 500 homes in Midvale, Utah, and Colorado supervised a decontamination of 2,500 homes in Grand Junction, those projects were caused by historic mining or smelter operations that polluted surrounding soils.

DCE a possible carcinogen

By contrast, Redfield contaminated moving streams of groundwater that have spread pollution to new homes and neighborhoods.

Redfield pumped out industrial solvents that disintegrate into DCE, which the U.S. Environmental Protection Agency classifies as a possible carcinogen.

A 1981 aerial photograph of the 11-acre complex shows "staining," or apparent pollution, flowing from a Redfield waste-oil tank and toward Cook Park homes. Amid mounting environmental woes, the factory shut down in June 1998.

Last spring, the state and Brown executives said they thought the plume was contained within a two-block area just north and east of the plant. But in August, they discovered an underground seam, less than 50 feet wide, carrying pollution around a bedrock barrier and north toward Cherry Creek.

Officials originally suspected the pollution would enter Cherry Creek and be diluted enough to stop posing health risks. But now they believe the plume turns northwest into an ancient underground channel of Cherry Creek and carries the pollution at least a mile beyond, out of Denver and into the Glendale city limits.

Groundwater samples show a plume of DCE just south of the creek from South Holly Street to somewhere past South Cherry Street. State officials say that extended plume, shaped like a finger, carries chemicals similar in makeup to the Redfield plume.

Redfield executives said they

don't know if the finger plume is theirs, and state officials said they're not sure how long it will take to learn the true extent and source of the pollution.

"I don't want to give any estimate," said Howard Roitman, hazardous waste director for the state health department. "We thought we knew (the plume length) a while ago, and we were proven wrong."

Now the Brown Group is trying to schedule pollution tests in dozens of apartments and condominiums in the plume's apparent path just south of the creek. State officials also plan tests north of Cherry Creek.

Regulators say it isn't easy to figure out which homes face the greatest risk of contamination.

At some points close to the factory, where the groundwater pollution is worst, the plume is 30 feet underground and the air inside houses is barely tainted.

As the plume flows closer to Cherry Creek, groundwater pollution is less concentrated, but it's as little as 8 feet underground, enabling DCE vapors to leak more easily into basements and crawl spaces.

"They found it in my closet right over there," said Ida Boye, 66, who has lived for 20 years in a one-story ranch house on the 5400 block of East Nebraska Way. Her home air tested 30 times greater than the health standard. "I felt safe living here before. Now they put in a ventilator, and I feel safe today."

State health officials noted that Colorado is one of the few states requiring extensive decontaminations for home air polluted by leaking industrial solvents. The U.S. Environmental Protection Agency is conducting a national review of the current health standard for the vapor.

In the meantime, the Brown Shoe Co. has two full-time workers canvassing the neighborhoods, performing \$1,000 air tests and installing ventilation fans in homes where pollution exceeds standards.

"We're working as fast as the system will allow us," said Lloyd Brunkhorst, technology director for Brown. "We're going to keep tracking it closely and stay with it."

Mark Obmascik can be reached at mobmascik@denverpost.com or 303-820-1415.

THE SUNDAY DENVER POST

& Rocky Mountain News

April 29, 2001

Rockymountainnews.com

★★★★★ — May vary outside metro Denver

denverpost.com

Leak ignored by state spreads

By Mark Obmascik
Denver Post Staff Writer

A toxic leak ignored by state regulators for two years now is among the worst in the Rocky Mountain West, forcing the decontamination of 310 southeast Denver homes and sending officials scrambling to learn how far the pollution has spread.

The underground plume of industrial solvents flows at least 2 miles north and west from the former Redfield rifle scope factory at 5800 E. Jewell Ave., state officials sus-

Toxins move into streambed in Denver

pect.

That's twice as far as regulators estimated just four months ago.

The problem: Toxins apparently have wandered into an ancient underground streambed that trickles beneath another neighborhood of houses and apartments.

State officials concede they still aren't sure where the pollution stops.

"I'd love to be able to tell you we see the end, but so far we have no indication that we've got it all tracked," said Marion Galant of the Colorado Department of Public Health and Environment.

State officials estimated 4,000 people live atop the plume. It's unknown how many of them have been exposed to unsafe levels of the chemical 1,1-dichloroethene, or

DCE, which the government classifies as a possible carcinogen. Dozens more neighborhood tests are being scheduled.

The Denver Post reported in December that Redfield executives warned the health department of pollution problems in 1994 and 1995, but state officials took no protective action until 1997. Meanwhile, the plume of DCE oozed be-

neath the Cook Park and Virginia Village neighborhoods as fast as 200 feet a year.

In December, 169 homes had been contaminated at levels exceeding the state's cancer standard. By last week, that number swelled to 310, with dozens of homes and apartment complexes still to be tested.

It wasn't just the raw numbers that raised concerns.

New tests yielded disturbing news: Some of the plume's worst

Please see TOXIC on 14A

State keeps close eye on diseased deer, elk

By Gary Gerhardt

News Staff Writer

In a campground a stone's throw east of the Carter Lake dam, southwest of Loveland, veterinarian Mike Miller sights a compressed air rifle and squeezes the trigger.

A tranquilizer dart rockets into the flank of a mule deer doe.

Several minutes later, when the animal drops, he and two assistants from the state Division of Wildlife will fasten a radio collar around its neck. Then, when the animal revives, they'll release it.

"We want to collar six to eight deer in this area, and 60 to 80 throughout the zones where we suspect there is chronic wasting disease in deer and elk," he said.

"We are looking at the relationship of movement patterns of deer and CWD. We know we have it in Unit 9 (a 100,000-acre triangle running from Fort Collins north to the Wyoming state line) and a few units around that, but it could be critical if it continues moving into eastern Colorado."

Unit 9 is the front line in the state's fight against CWD, a deadly deer and elk disease whose implications for people are not yet known. Mike Miller is one of a group of experts studying the disease — and taking steps to counter its spread.

Unit 9 has one of the highest concentrations of deer with chronic wasting disease in the state — about 15 percent of total deer population within the zone.

Other areas have percentages of infection almost as great; still others much lower. All are in a region roughly between the North and South Platte rivers from Fort Collins to the Nebraska state line.

So far, state efforts in Unit 9 are in three principal arenas: studying, testing and collaring animals; teaching hunters about the disease and urging them to take precautions; and reducing the num-



Thomas Baker, left, Nolan Hsieh and Mike Miller take a blood sample from a darted mule deer in the Carter Lake area near Loveland to determine if the animal has chronic wasting disease. If the disease can jump between species, the answer could have life-and-death implications for hunters in northeastern Colorado and southeastern Wyoming.

Steven G. Smith/News Staff Photographer

bers of diseased animals.

Wildlife officials authorized a special hunt for January and February to cull the deer population in Unit 9, which has an estimated 2,200 deer. About 300 licenses were issued, and hunters were required to surrender the heads so they could be tested for CWD.

Of the 209 deer killed, 19 tested positive.

"We needed a baseline," Miller said. "So if it reduces the density,

we'll see if it reduces CWD in that area."

Testing took three to six weeks, and hunters were notified of the results. Even if they came back positive, it was up to the hunter whether to eat the animal.

Division biologists are in the same area trying to kill an additional 100 to 200 animals on private and public lands to test the relationship between lower deer densities and disease prevalence.

Big game hunting regulations clearly identify the game units where CWD has been found, and a special section explains CWD. It also advises hunters to wear rubber gloves when field dressing an animal and urges minimal handling of brain and spinal tissues and thorough hand-washing.

Still unknown is whether deer that test positive for CWD should be consumed.

Miller says he would not eat a

deer that tests positive.

"We have nothing to indicate CWD can be transmitted to humans, but I wouldn't even feed a negative animal to my children because the decision whether to eat one or not must be made by the individual, and my children aren't yet old enough to make that decision for themselves," Miller said.

"I also wouldn't let them drink liquor, smoke or eat raw oysters."